

CLAIMS:

1. A nonwoven filter media, comprising at least one glass wool fiber web having a gamma value of at least about 14, and a surface area of at least about  $1.2 \text{ m}^2/\text{g}$ .
2. The nonwoven filter media of claim 1, wherein the glass wool fiber web is formed from glass wool fibers having a diameter in the range of about  $0.1\mu$  to  $4.5\mu$ .
3. The nonwoven filter media of claim 2, wherein the glass wool fibers have a diameter selected from the group consisting of about  $0.69\mu$  and about  $4.5\mu$ .
4. The nonwoven filter media of claim 1, further comprising chopped glass fibers combined with the glass wool fibers.
5. The nonwoven filter media of claim 4, wherein the glass wool fibers and the chopped glass fibers form a filtration layer.
6. The nonwoven filter media of claim 5, wherein glass wool fibers are present in the filtration layer in the range of about 70% to 99% by weight and the chopped glass fibers are present in the filtration layer in the range of about 1% to 30% by weight.
7. The nonwoven filter media of claim 1, wherein the filter media is a wet laid filter media.
8. A nonwoven filter media, comprising at least one glass fiber web having a gamma value of at least about 14, and an apparent density of at least about  $0.15 \text{ g/cc}$ .
9. The nonwoven filter media of claim 8, wherein the at least one glass fiber web includes glass wool fibers having a diameter in the range of about  $0.1\mu$  to  $4.5\mu$ .

10. The nonwoven filter media of claim 9, wherein the glass wool fibers have a diameter of about  $0.69\mu$ .
11. The nonwoven filter media of claim 8, wherein the filter media is a wet laid filter media.
12. The nonwoven filter media of claim 8, wherein the apparent density is in the range of about 0.15 g/cc to 0.21 g/cc.
13. A filter media, comprising:  
a support layer; and  
a filtration layer including glass wool fibers having a diameter in the range of about  $0.1\mu$  to  $4.5\mu$ ;  
wherein the filter media has a gamma value of at least about 14.
14. The filter media of claim 13, wherein the support layer includes glass fibers having a diameter in the range of about  $4\mu$  to  $30\mu$ .
15. The filter media of claim 13, wherein the filter media has a surface area of at least about  $1.2\text{ m}^2/\text{g}$ .
16. The filter media of claim 13, wherein the filter media has an apparent density of at least about 0.15 g/cc.
17. The filter media of claim 16, wherein the filter media has an apparent density in the range of about 0.15 g/cc to 0.21 g/cc.
18. The filter media of claim 14, wherein the glass fibers in the support layer have a fiber diameter of about  $4.2\mu$  and the glass wool fibers that form the filtration layer have a fiber diameter of about  $0.69\mu$ .

19. The filter media of claim 13, wherein the filtration layer further includes chopped glass fibers combined with the glass wool fibers.
20. The filter media of claim 19, wherein the glass wool fibers are present in the filtration layer in the range of about 70% to 99% by weight and the chopped glass fibers are present in the filtration layer in the range of about 1% to 30% by weight.
21. A method of making a filter media, comprising the steps of:
  - preparing a slurry containing glass wool fibers, chopped glass fibers, water, and an acidic agent, the slurry having a pH in the range of about 1 to 12;
  - subsequently adding a pH adjusting agent to the slurry to adjust the pH to within the range of about 6 to 10; and
  - removing the water from the slurry to form a wet laid glass fiber web having a gamma value of at least about 14.
22. The method of claim 21, wherein the slurry is prepared having a pH in the range of about 2 to 4.
23. The method of claim 21, wherein the pH adjusting agent is an alkaline pH adjusting agent.
24. The method of claim 23, wherein the alkaline pH adjusting agent is selected from the group consisting of a metal hydroxide, a bicarbonate, a carbonate, an amine, and ammonium hydroxide.
25. The method of claim 23, wherein the alkaline pH adjusting agent is ammonium hydroxide.
26. The method of claim 21, wherein the acidic agent is selected from the group consisting of mineral acids and organic acids.

27. The method of claim 21, wherein the acidic agent is selected from the group consisting of sulfuric acid, hydrochloric acid, formic acid, and citric acid.
28. The method of claim 21, wherein the glass wool fibers are present in the web in the range of about 50% to 99% by weight, and the chopped glass fibers are present in the web in the range of about 1% to 50% by weight.
29. The method of claim 21, wherein the glass wool fibers have a fiber diameter in the range of about  $0.1\mu$  to  $4.5\mu$ .
30. The method of claim 21, wherein the chopped glass fibers have a fiber diameter in the range of about  $4\mu$  to  $30\mu$ .